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(54) NEW COMPOUND AND SURFACTANT

(57) Abstract:

PROBLEM TO BE SOLVED: To provide a new compound having a surface-activating ability, and preferably usable as a surfactant.

SOLUTION: This new compound is a compound of formula I {X is a group having a polymerizable C=C bond, preferably a group of formula II [R and R' are each H, or methyls; (x) is 0 or a number of • 1; (y) is 0 or 1] or the like; M is H, a metallic atom or an ammonium; R1 is a hydrocarbon group; (n) is 0 or a number of • 1; (m) is a number of • 3}, e.g. a compound of formula III. The compound of formula I can be obtained by adding a cyclic sulfonic ester to a compound having a polymerizable C=C bond, of the formula X-O-(R1-O)n-H. The compound of formula I can be especially preferably used as a surfactant having a reactivity with a radical polymerization group such as a vinyl group or the like, such as an emulsifying agent for an emulsion polymerization, a disperser for a suspension polymerization, or the like.

K-0- (R'-0) (- (Cm) - SUM

LEGAL STATUS

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1. This document has been translated by computer. So the translation may not reflect the original precisely.

2. **** shows the word which can not be translated.

3.In the drawings, any words are not translated.

CLAIMS

[Claim(s)]

[Claim 1]: The following general formula (1) [Formula 1]

X-O-(R1-O)n-(CH2)m-SO3M (1)

(-- X expresses among a formula the basis which has the carbon-carbon double bond in which a polymerization is possible, M expresses a hydrogen atom, a metal atom, or ammonium, R1 expresses a hydrocarbon group, n expresses 0 or one or more numbers, and m expresses three or more numbers New compound expressed with).

[Claim 2]: The general formula of the following [double bond / carbon-carbon / which X has]

(2) [Formula 2] R R' O CH=C--(CH₂)x--(C)y-- (2)

(-- R and R' expresses a hydrogen atom or a methyl group among a formula, x expresses 0 or one or more numbers, and y expresses the number of 0 or 1 New compound according to claim 1 which is).

[Claim 3]: The general formula of the following [X] (3) [Formula 3]

$$CH_2-O-(C)y-(CH_2)x-C=CH$$
 $CH CH CH_2-R^2$
(3)

(R and R' expresses a hydrogen atom or a methyl group among a formula, and x expresses 0 or one or more numbers.) y expresses the number of 0 or 1, R2 expresses the basis expressed with a hydrocarbon group or -O-R3, and R3 expresses the acyl group by which a hydrocarbon group, an acyl group, the hydrocarbon group by which one or more hydrogen atoms were replaced by the fluorine atom, or one or more hydrogen atoms were replaced by the fluorine atom The new compound according to claim 1 which is the basis expressed.

[Claim 4]: The general formula of the following [X] (4) [Formula 4]

$$\begin{array}{cccc}
O & R' & R \\
(C)y & (CH_2)x & C = CH \\
\hline
(R^4)p & (4)
\end{array}$$

(-- R and R' expresses a hydrogen atom or a methyl group among a formula, x expresses 0 or one or more numbers, y expresses the number of 0 or 1, R4 expresses a hydrocarbon group, and p expresses the number of 0, or 1-4 New compound according to claim 1 which is the basis expressed with).

[Claim 5] The surfactant which consists of a compound of four a claim 1 or given in any 1 term.

[Claim 6] The emulsifier for emulsion polymerizations which consists of a surfactant according to claim 5, the dispersant for suspension polymerizations, or a resin modifier.

[Translation done.]